

Project: 2

Course: EECS3421

Deadline: Mar 25<sup>th</sup>, 11:59pm

Submission: via eClass

This project is going to assess your ability to implement a database and write some advanced queries.

Before you start, I would like to remind you that this assignment is different from the assignments that you have completed in the lecture, as this assignment is an **exam** that you take home. This means you can neither discuss your solution with peers nor get help from other resources including but not limited to peers/others/ChatGPT. Submitting the solution for this project is considered as an approval that the work is 100% yours. Therefore, we reserve the right to check for any kinds of academic dishonesty including plagiarism and cheating.

Refusing to follow the policy stated above, is a violation of academic integrity that will have a serious consequence. Please read about the definition of academic integrity and the penalty that one may face, in case they violate academic integrity in <a href="https://lassonde.yorku.ca/student-life/academic-support/academic-honesty-integrity">https://lassonde.yorku.ca/student-life/academic-support/academic-honesty-integrity</a>.

## Problem Description:

For this assignment, we are using the data model that solves the problem described in the first assignment. Attached to this description, you'll see ER diagram for the description of the first assignment.

Based on the information given in the ERD, you need to create the tables, insert data as much as required and write the queries that solves the problems given below. The name of the database should be **PROJECT2\_W23**. The name of the attributes and tables are given in the ER diagram.

For each question below write ONE query. The query can contain a subquery if it is needed.

Write a query to answer the following questions:

- 1- How many students have taken "Introduction to Database Systems"?
- 2- For the given year, what courses did not have a final exam as an assessment?
- 3- Find all the courses that the given question has been used to assess the students. The description of the question is given (i.e. question attribute in the Questions table)
- 4- Which professor has used "seminar" as an assessment at least once?
- 5- For the given course, what CLOs and GAIs have been assessed?
- 6- What percentage of students passed a given course. The course code is given to solve this problem.
- 7- What percentage of the assessment for the given course, meets the given learning outcome. The course code and CLO is given.
- 8- What types of assessments have been offered by the given course in a given year and term.
- 9- What students have been assessed for the given CLO at least once in any of the courses that they have taken.
- 10- Find the student who has received either the minimum or the maximum grade for the given course and assessment. Course code and assessment id is given.

Submission You submit one .sql file that contains all the codes that you have written for the queries above. Please note that we don't need to see the insert or create statements. Therefore, please do not include it.
Marking Scheme: Each query carries 2 points for the total of 20 points.